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Overbeek, M.M.; de Schipper, J.C.; Lamers-Winkelman, F.; Schuengel, C.

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Effectiveness of specific factors in community-based intervention for child-witnesses of interparental violence: A randomized trial☆

Mathilde M. Overbeek*, J. Clasien de Schipper, Francien Lamers-Winkelman, Carlo Schuengel

Department of Clinical Child and Family Studies & EMGO Institute for Health and Care Research, VU University Amsterdam, The Netherlands

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ABSTRACT

A community-based intervention with specific factors for children and parents exposed to interparental violence (IPV) was compared with a control intervention based on non-specific factors. We hypothesized that participation in an intervention with specific factors, focused on IPV, parenting and coping, would be associated with better recovery. IPV exposed children and parents were group randomized over a specific factors- and control intervention. Baseline, posttest and follow-up measurements of 155 parents and children (aged 6–12 years, 55.5% boys) were fitted in a multilevel model. Outcomes were parent and teacher reported children's internalizing and externalizing problems (CBCL, TRF), child self-reported depressive symptoms (CDI) and parent and child reported children's post-traumatic stress symptoms (TSCYC, TSCC). Based on intention-to-treat and completer analyses, children in the specific factors intervention did not show better recovery than children in the control intervention. Children in both interventions decreased significantly in parent-reported children's internalizing and externalizing problems and post-traumatic stress symptoms. Children reported a decrease in their mean level of depressive and post-traumatic stress symptoms. Teachers reported a decrease in internalizing problems, but not in externalizing problems. No association between time since exposure and level and course of symptoms was found. Treatment differentiation was assessed and both programs were significantly different on hypothesized effective factors. Higher treatment adherence in both programs did not result in a larger difference in recovery. IPV exposed children improve over the course and after participating in a community-based child- and parent program, but specific factors in intervention may not carry additional benefits when implemented in community settings.

Interparental violence (IPV) is distressing for children to witness. In response to conflict, children frequently show negative emotional responses and high levels of physiological reactivity. Higher levels of negative emotionality and physiological reactivity are associated with children's adjustment problems and cognitive problems (El-Sheikh, 2005). Children's emotional and behavioral regulation in the face of IPV is associated with children's internalizing and externalizing problems (Cummings & Davies, 2010). Children exposed to IPV exhibit more emotional, behavioral, social, and cognitive problems

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* Corresponding author address: Department of Clinical Child and Family Studies, VU University Amsterdam, Van der Boechorststraat 1, 1081 BT Amsterdam, The Netherlands.

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and more trauma symptoms than children who grow up in nonviolent homes (Evans, Davies, & DiLillo, 2008; Kitzmann, Gaylord, Holt, & Kenny, 2003; Sternberg, Baradaran, Abbott, Lamb, & Guterman, 2006), and exposure to psychological and physical aggression has been shown to contribute independently to behavior problems (Litrownik, Newton, Hunter, English, & Everson, 2003). Interparental violence is a considerable problem; in the USA 17% of all children (aged 0–17 years) witnessed psychological or physical IPV at some time in their childhood (Hamby, Finkelhor, Turner, & Ormrod, 2011). Alink et al. (2011) estimated that 13% of Dutch adolescents have been exposed to IPV.

Because of the many children who grow up in violent homes, and the wide range of problems these children exhibit, exposure to IPV is a public mental health issue. Universally accessible, cost-effective and short-term interventions for children with clinical as well as for children with sub-clinical levels of problems are necessary to prevent or limit adverse consequences of exposure to trauma such as IPV (Weisz, Sandler, Durlak, & Anton, 2005). Unfortunately, many studies on interventions for children exposed to IPV have diverse methodological limitations, such as inappropriate or no comparison groups, high rates of attrition, small sample sizes, and no follow-up. Few carefully designed interventions for children exposed to IPV have been developed, and even fewer of these interventions have been thoroughly tested (Rizo, Macy, Ermentrout, & Johns, 2011).

Eight well-tested interventions can be distinguished (Cohen, Mannarino, & Iyengar, 2011; Graham-Bermann, Lynch, Banyard, Devoe, & Halabu, 2007; Jouriles et al., 2009; Lieberman, Van Horn, & Ippen, 2005; McFarlane, Groff, O'Brien, & Watson, 2005; McWhirter, 2011; Sullivan, Bybee, & Allen, 2002; Wagar & Rodway, 1995). These studies vary in target group (child, parent, or both), intervention goal (parent-child relationship, parenting skills, parental mental health, coping or the trauma), and context (clinical, community-based). Three well-tested interventions specifically developed for children exposed to IPV with clinical levels of problems have been found to be effective in randomized controlled efficacy trials. A brief (8 week) individual Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) for witnesses of IPV was shown to be more efficacious in reducing post-traumatic stress symptoms and anxiety symptoms than the usual treatment for parents and children exposed to IPV: Child Centered Therapy (Cohen et al., 2011). The 50-week trauma-focused relationship based intervention Child-Parent Psychotherapy (CPP) for preschoolers and their mothers exposed to IPV was compared with case management plus treatment as usual in the community. CPP was shown to be more efficacious in reducing post-traumatic stress symptoms and behavioral problems than care as usual (Lieberman et al., 2005). The Project Support intervention involved child management skills and instrumental and emotional support for mothers of children with clinical levels of conduct problems. Compared with existing services, Project Support was shown to be more efficacious in reducing conduct problems and improving parenting behaviors and maternal psychiatric symptoms (Jouriles et al., 2009).

Usually, if children cross a certain threshold of behavioral dysfunction linked to exposure to IPV, they are referred for treatment. It would be even better to target children at risk before problems reach clinical levels (Weisz et al., 2005). Two randomized controlled trials used a community-based population. McWhirter (2011) compared an emotion-focused coping group intervention with a goal-oriented coping group intervention, and found that mothers and children in both interventions improved in well-being, self-efficacy and family bonding. In addition, mothers in the emotion-focused coping intervention reported a greater quality of social support, and mothers in the goal-oriented coping intervention showed a greater reduction in family conflict and alcohol use. The second well-tested community-based intervention for parents and children exposed to IPV is 'Kids' Club', an intervention program for mothers and children (Graham-Bermann, 1992). Efficacy of this 10-week community based group intervention has been studied by Graham-Bermann and her colleagues in a controlled clinical trial. A sequential assignment procedure allocated participants to three conditions: a condition with parallel child and parent sessions, a condition with only child sessions and a waiting-list condition. They found that children in the condition with parallel child and parent sessions showed the most improvement on internalizing and externalizing behavioral problems, and children in the waiting-list condition improved the least; indicating the importance of including parents in interventions for children exposed to IPV (Graham-Bermann et al., 2007).

The positive results of specific interventions for children exposed to IPV suggest that elements such as trauma components in TF-CBT and CPP, parenting components in Project Support, and coping components in the study of McWhirter (2011) may carry specific benefit over more general clinical techniques. However, previous studies compared uniform experimental conditions with diverse control conditions (Cohen et al., 2011; Jouriles et al., 2009; Lieberman et al., 2005), or compared two conditions with different specific factors (McWhirter, 2011). Therefore, it is unknown to what extent non-specific factors may offer an alternative explanation for the effects found. In particular, it would be important to know whether specific factors in interventions would still carry additional benefit over interventions based on non-specific factors, if these specific factors are implemented in community-based interventions. Community settings usually have more heterogeneous populations and less resources for carrying out interventions than programs carried out in the context of efficacy trials (Marchand, Stice, Rohde, & Becker, 2011).

For children in the Netherlands exposed to psychological and/or physical IPV the community-based intervention "En nu ik. . .!" ("It's my turn now!") has been developed (Blijfgroep, 2009; De Ruijter, 1999). The development of the child sessions of this intervention drew on work published about the program Kids' Club (Graham-Bermann, 1992), but several topics of sessions have been altered (e.g. more time spent on identifying, differentiating, and dealing with emotions) or added (e.g. secrets, contact with the violent parent, and the future). Treatment techniques used in the child sessions are based on trauma theory (Perry, 1993) and focus on readjusting affective responses to trauma-related thoughts and memories. Directly addressing the traumatic experiences is used to prevent avoidance of the topic, and provide children with a sense of mastery over the topic (American Academy of Child and Adolescent Psychiatry, 2010). Factors used in this intervention for children

are affect modulation (e.g. identification of feelings to make sense of violence experiences) and emotion regulation skills (to express feelings in a non-violent way), coping and processing, social skills in interaction with peers, and enhancing future safety and development (developing a safety plan). Affective functioning in children is closely aligned with relationships with parents and parental availability, and child rearing may become challenged as a result of IPV (Davies, Sturge-Apple, & Cummings, 2004). The original Kids' Club was later expanded to include parent sessions. For the intervention program in the Netherlands however, parallel parent sessions were developed independently from Kids' Club (Blijfgroep, 2009). Theoretical conceptualizations used in the development of the parent sessions were trauma theory (Perry, 1993) and attachment and parenting theories (Bowlby, 1973; Grych, 2002). In these parent sessions, the focus for parents is on psycho-education, improving parenting and disciplinary skills, assisting the parent with accurate interpretation of the child's feelings and actions, and providing emotional support to parents and enhancing parents' own emotional adjustment. All of these areas of focus are aimed at improving parenting quality and reducing children's adjustment problems. Lamers-Winkelman (2003) found that children who participated in "It's my turn now!" exhibited at posttest less post-traumatic stress symptoms, and less internalizing and externalizing problems, compared to pretest. However, no comparison was made with children receiving no or a different intervention, and therefore it is still unknown to what extent the program contributed to the recovery in children.

In the present study, we used a randomized controlled trial design to compare the effectiveness of specific factors in a community-based intervention program with the effectiveness of non-specific factors in a control program. This control program had the same structure as the specific factors intervention program, but was based solely on non-specific factors (Grencavage & Norcross, 1990) and was developed for this study to explore the added value of previously found efficacious specific factors in a community-based intervention. The control condition for children consisted of a program with play activities. The parent sessions offered social contact, general topics for discussion, such as fun things to do with your child, and creative activities. Based on previous research, the main hypothesis of this study was that children participating in the intervention with specific factors, and therefore exposed to factors focused on trauma, parenting and coping would show a stronger recovery on behavior problems and trauma symptoms than children participating in the control condition. Furthermore, because of ethical objections in the community settings no waitlist/no-treatment condition was included in the study design, and in order to address the alternative explanation that improvement in adjustment problems could be explained by the passage of time, the association between time since exposure and level and course of symptoms was tested. Finally, treatment integrity was tested by assessing treatment differentiation and adherence of both programs. Because of standardized training and manuals it was expected that treatment techniques based on trauma theory and parenting and attachment theories would be applied more often in the child sessions respectively parent sessions of the program with specific factors than in the control program, and that higher treatment adherence in both programs would result in a larger difference in recovery between both programs.

Method

Participants

This randomized controlled trial was conducted from September 2009 (start inclusion) to January 2012 (last follow-up assessment). Parents and children were recruited from eight organizations in seven cities in urban and rural regions in the Netherlands. Parent-child dyads were eligible for participation if they had experienced psychological and/or physical IPV and if they indicated the violence had stopped at the time parent and child started with the program. According to Dutch law, IPV includes incidents of psychological as well as physical violence, and for this reason, children exposed to either form of IPV could participate in the study. Children did not have to exhibit (clinical) problems before admittance to the program. Parent-child dyads could not participate if the parent and/or child had intellectual, behavioral, or psychiatric problems that would impede functioning in the treatment group and/or would create an unsafe environment for other participants in the group. If two siblings participated in the intervention, the sibling most eligible (based on age and reading abilities) for participation in the study was randomized and the second sibling received the same treatment but was not included in the study ($n = 22$). The two conditions did not differ significantly at baseline regarding demographic characteristics (Table 1).

Procedure

Participants were recruited from families referred to child and family services specialized in IPV that offered the intervention program. Referral was usually done by police or child protection agencies, when a domestic violence dispute became known. During intake for the intervention program the staff of the child and family service gave all parents and children an information letter about the study and explained that the organization participated in a research project to assess which program would be most effective in helping children exposed to IPV. Parents and children were told that in this period two programs were offered that could be useful. Only after informed consent, group assignment took place. After assignment parents received an information leaflet about the program they would participate in. Group assignment was chosen over individual assignment, to make implementation of the study more feasible (Campbell, Elbourne, & Altman, 2004). Each group was randomly assigned to either the experimental or control arm by use of block randomization with a minimum of three groups. The research protocol was approved by the Medical Ethics Committee (METc VUmc 2009/99/NL26649.029.09). The

Table 1
Baseline characteristics.

Characteristics	Intervention ($N = 100$)	Control ($N = 55$)	Total ($N = 155$)	Difference statistics
Sex child. No. (%)				$\chi^2 = 1.41$, $p = .235$
Male	59 (59.0)	27 (49.1)	86 (55.5)	
Age child, mean (SD), y	9.35 (1.55)	8.99 (1.43)	9.22 (1.51)	$t(153) = 1.41$, $p = .160$
Child born in Netherlands. No. (%)	94 (94.0)	50 (90.9)	144 (92.9)	$\chi^2 = 0.51$, $p = .473$
Ethnic background caregiver. No. (%)				$\chi^2 = 2.29$, $p = .514$
Dutch	44 (44.0)	23 (41.8)	67 (43.2)	
Turkish/Moroccan	21 (21.0)	8 (14.5)	29 (18.7)	
Antilles/Suriname	20 (20.0)	11 (20.0)	31 (20.0)	
Other countries	15 (15.0)	13 (23.6)	28 (18.1)	
Participated with mother. No. (%)	96 (96.0)	52 (94.5)	148 (95.5)	$\chi^2 = 0.17$, $p = .676$
Yearly income < €15.000. No. (%)	63 (63.3)	36 (72.0)	99 (66.4)	$\chi^2 = 1.04$, $p = .307$
Education. No. (%)				$\chi^2 = 0.90$, $p = .637$
Low	42 (42.9)	21 (38.2)	63 (41.2)	
Middle	45 (45.9)	25 (45.5)	70 (45.8)	
High	11 (11.2)	9 (16.4)	20 (13.1)	
Length abusive relationship. No. (%), y	11.09 (6.17)	10.46 (5.90)	10.87 (6.06)	$t(150) = 0.61$, $p = .545$
Still with abusive partner. No. (%)	20 (20)	6 (10.9)	26 (16.8)	$\chi^2 = 2.10$, $p = .147$
Contact with abusive partner. No. (%)	63 (64.3)	31 (56.4)	94 (61.4)	$\chi^2 = 0.93$, $p = .334$

Committee required that both custodial parents (the caregiving, as well as the non-caregiving, usually violent, co-parent) were informed about possible research participation of their child and that both were asked for informed consent. Given the often sensitive relationship between parents and the law on privacy, the caregiving parent was asked to inform the other parent by means of an information letter and brochure from the researchers. In this letter the non-caregiving parent was asked to give written consent for participation of the child in the study. The Ethics Committee accepted passive consent of the non-caregiving (violent) parent based on pilot data showing that only a minority responded to the informed consent letter. Requiring active informed consent from both parents (received in only 19% of the cases) would have led to an increased bias in studies of children exposed to IPV and thus limit children's access to evidence-based care. If a parent chose not to participate in the study, parent and child could still participate in the program.

Main therapists for parent and child sessions ($N = 34$) were linked to conditions and conducted either the specific factors program ($n = 25$) or control program ($n = 9$). Parents, children, therapists, and the researchers were blind to group allocation until two weeks before the start of the program to prevent a bias in the intake procedure. Data were collected at three time points. To limit attrition, the data collection adhered to the structure of the intervention by inviting all participants one week before the program started to the setting where the program would take place (community center, mental health clinic) to fill out questionnaires for the first time (T1). One week (T2) and six months (T3) after the end of the program, parents and children were again invited to this setting to fill out the same questionnaires. If possible parents and children filled out the questionnaires on their own, in order to provide as much privacy as possible. Parents and children were in separate rooms when completing the questionnaires. In both rooms one or more research assistants were present to answer questions and, if necessary, assist with completing the questionnaires. For parents who had difficulty with (reading) the Dutch language, translated questionnaires were provided (in English), a research assistant could help reading the questions, or an interpreter would translate and assist with completing the questionnaires. All research assistants and interpreters assisting parents and children followed a strict protocol, with written explanations for specific 'difficult' questions, to standardize assessment for all participants. Parents received €15 after completing the first assessment, €25 after participating in the program and completing the second assessment, and €40 after completing the follow-up assessment. Children received a gift after each assessment.

As the flow chart shows (Fig. 1), 164 parent-child dyads were assessed at baseline. One hundred and eight parent-child-dyads were randomized into the specific factors condition, and 56 into the control condition. The ratio was skewed 2:1 to increase statistical power for testing moderators of change in the specific factors condition. Of the 164 randomized parent-child dyads, 33 dropped out before or during treatment and 2 withdrew consent for participation in the study during pretest and posttest, but completed treatment. As a result, 85 experimental (79% of total) and 46 control (82% of total) parent-child dyads (148 mothers, 7 fathers) completed the intervention and were followed up for completer analyses. On the basis of .80 power to detect a medium effect size ($f = .25$) approximately 45 participants were required in each condition ($p = .05$, two-tailed). Analyses comparing those parent-child dyads who dropped out of the study with those who remained in the study showed no significant differences regarding child's age, gender or ethnicity, marital or educational status of the caregiving parent, family income, degree, type and duration of interparental violence, or emotional/behavioral problems or post-traumatic stress symptoms of the child at baseline.

Intervention programs

Both interventions consisted of nine sessions of 90 min each, with parallel sessions for children and for their non-violent custodial parent. All nine sessions followed the same, predictable structure, to create a safe environment. Children aged 6 to

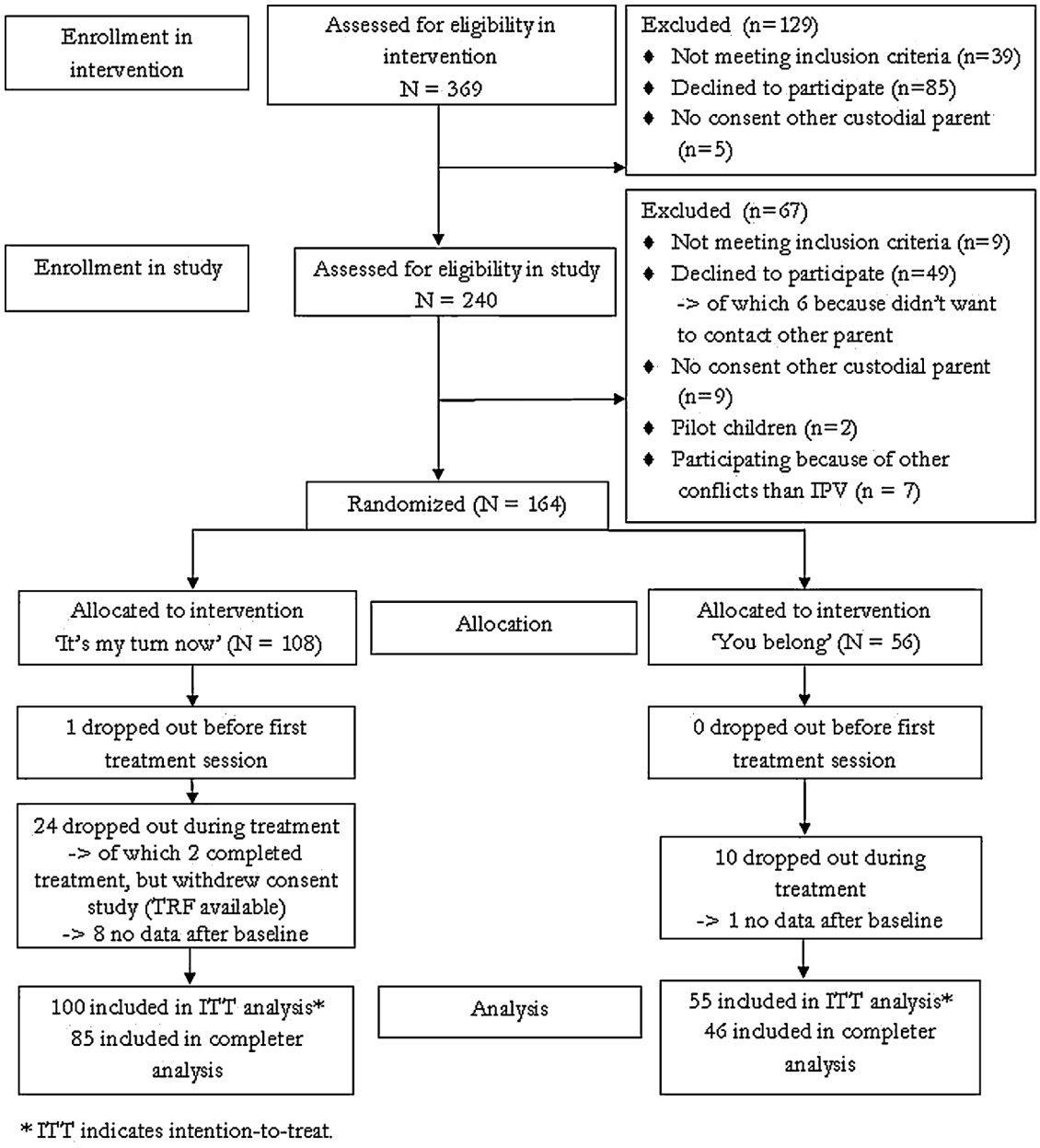

Fig. 1. Consort flow chart.

12 years could participate in both interventions. Each treatment group had a maximum of eight children or parents. More information regarding both programs can be found in Overbeek, De Schipper, Lamers-Winkelman, and Schuengel (2012). Overall attendance rates varied from 0 to 9 sessions for the child ($M = 6.20$, $SD = 2.26$). Participation in the program did not differ significantly between conditions: $t(1, 162) = -0.01$, $p = .99$, nor by age or gender of the child, or cultural background. Attendance was not associated with level of problems at baseline.

Specific factors intervention program 'En nu ik. . .!' ('It's my turn now!'). The specific factors intervention was carried out in organizations with a long history of supporting families exposed to IPV through (child) group interventions. Child and parent sessions were usually conducted by a social worker together with a mental health care professional. Therapists received a one-day training by one of the developers of the program before they could provide this standardized program and they followed a manual for every session. During the intervention, therapists participated in at least three peer supervision meetings. The first version of "It's my turn now!" was developed in 1999 (De Ruijter, 1999), and the program was adapted in 2009 by a consortium formed by the Women Shelter, the Center of Youth Care, social work and mental health care services in

Amsterdam (the Netherlands; Blijfgroep, 2009). The specific factors intervention program had three main goals for children: (a) to process the interparental violence experiences, (b) to learn how to differentiate and express emotions, and (c) to learn how to cope with feelings and problems in a different (nonviolent) way. The first two out of nine sessions were used for learning to recognize and name emotions. Not until the third session the topic of violence was introduced, and children learned how to deal with their emotions regarding the violence. The last two sessions were about the future and saying goodbye.

In the parent sessions the focus was on psycho-education and discussion (e.g. about the impact of family violence, parenting role vs. the role of the child, and contact with the other parent), improving parenting and disciplinary skills to increase positive behavior and decrease negative behavior (e.g. by giving compliments and setting boundaries), assisting the parent with accurate interpretation of and dealing with the child's feelings and actions, providing emotional support to parents, and focus on enhancing the social network, and enhancing parents' own emotional adjustment (e.g. feelings of anger, guilt, and shame); all aimed at improving parenting quality and reducing children's adjustment problems. Used methods were discussion, role play and home work assignments handed out at the end of each session and discussed at the beginning of the next session. In the assignments parents were instructed to observe (e.g. "How does your child feel?" "What does your child like to do?"), compliment and talk with their child (e.g. "How do you feel today?" "How can you express anger in a nonviolent way?" "How do you feel about going to the other parent?"), to take good care of themselves (e.g. by doing something nice for themselves, make a box with compliments for themselves), and to take steps to increase their social network. Although many elements used in these parent sessions are common to parent sessions of other programs for children exposed to IPV, e.g. Mom's Empowerment program (Graham-Bermann et al., 2007), elements specific to the context of child and family welfare in the Netherlands have been added, such as specific attention to co-parenting when both parents retain legal parenting rights, more nonverbal activities given the diversity of language backgrounds in the immigrant groups, and a focus on the caregiving parent instead of only mothers.

Control program "Jij hoort erbij" ("You belong"). The control program was based on an analysis of non-specific factors used in the specific factors intervention program (Mohr et al., 2009). Only non-specific factors of interventions were used in this program, such as attention, amount of treatment contact, a structured environment, positive attention from the therapist, positive expectations, distraction and social support and interaction among group participants. Therapists were instructed not to focus on traumatic experiences, emotions, parenting, or coping.

Measures

Internalizing and externalizing problems. Parents reported about their children's internalizing and externalizing problems by use of the Dutch translation of the Child Behavior Checklist for Children 6–18 (CBCL; Achenbach & Edelbrock, 2001; Verhulst, Ende, & Koot, 1996). This questionnaire has proven to be both valid and reliable in research with clinical populations. The CBCL consists of 119 items with which parents rate the behavior of their child on a 3-point scale, consisting of 0 (*not true*), 1 (*sometimes true*) and 2 (*very/often true*). The broadband scale *Internalizing Problems* consists of anxiety/depression, withdrawal and somatic complaints subscales. The broadband scale *Externalizing Problems* consists of aggression and delinquency subscales. On each scale a continuous mean score, as well as a dichotomous clinical/non-clinical score can be calculated. In the current study, α was .85–.87 (over assessments) for Internalizing, and α was .92 (over assessments) for Externalizing Problems. Teachers reported about the internalizing and externalizing problems of children using the Dutch translation of the Teacher Report Form 6–18 (TRF; Achenbach & Edelbrock, 2001; Verhulst, Ende, & Koot, 1997), similar to the CBCL. In the current study, α was .84–.87 (over assessments) for Internalizing, and α was .93–.94 (over assessments) for Externalizing Problems. Children aged 7.5 years and older filled out the 27-item Dutch translation (Timbremont & Braet, 2009) of the Child Depression Inventory (CDI; Kovacs, 1982), to assess depressive symptoms. Per item children were asked to choose one of three sentences that fitted best with their feelings and thoughts in the past two weeks. Children's answers can be calculated into a total score (ranging from 0 to 54). In the current study, α was .82–.87 (over assessments). The CDI has shown high test–retest reliability (r = .79), and high criterion validity (Timbremont & Braet, 2009).

Post-traumatic stress symptoms. To assess the degree of post-traumatic stress symptoms children experienced, parents filled out the Trauma Symptom Checklist for Young Children (TSCYC) (Briere, 1997; Dutch translation by Lamers-Winkelman, 1998), for children aged 3 to 12 years. Parents rated the behavior and emotions of their child in the past month on 90 items with a 4-point Likert scale, ranging from 1 (*not at all*) to 4 (*very often*). This questionnaire includes two scales to assess the tendency of caretakers to under-report or over-report symptoms, and nine clinical scales. The clinical scale *Total Post-traumatic Stress* (27 items) consists of three subscales (Intrusion [9 items], Avoidance [9 items] and Arousal [9 items]). An example of an item of this scale is "Bad dreams or nightmares." Alphas of the scale *Total Post-traumatic Stress* in the current study ranged from .88 to .89 (over assessments). This questionnaire has shown to be reliable and valid for use with children exposed to violence (Briere et al., 2001), also in the Netherlands (Nan & Koopman, 2009). Children aged 7.5 years and older, reported on their own level of post-traumatic stress symptoms with the Trauma Symptom Checklist for Children (TSCC; Briere, 1995; Dutch translation by Bal, 1998). The TSCC consists of 54 items with a 4-point Likert scale, ranging from 0 (*never*) to 3 (*almost all the time*). In this questionnaire also two validity scales are included to assess the tendency of children to under-report or over-report problems, as well as six clinical scales. An example of an item of the clinical scale *Post-traumatic Stress* (10 items) is "Remembering things I don't want to remember." In the current study, α was .78–.85 (over assessments) for the clinical scale Post-traumatic Stress. The TSCC has shown adequate reliability and validity in a variety of

studies with traumatized children (Lanktree et al., 2008). In the Netherlands TSCC showed convergent and criterion validity (Curiel, 2005).

Interparental violence. To assess the degree and type of IPV, parents filled out the Revised Conflict Tactics Scales (CTS2; Straus, Hamby, BoneyMcCoy, & Sugarman, 1996). For each item parents were asked to rate how often this specific tactic was used, either by themselves or by their partner, in a conflict situation in the last year of the violent relationship, ranging from 1 (*never happened*) to 8 (*more than 20 times in the last year*). Each rating was recoded into a frequency score (range: 0–25). Tactics were clustered into five scales, of which the two scales most commonly associated with children's adjustment problems after IPV exposure were used in this study: Psychological Aggression (8 items): $\alpha = .73$ for self-used, $\alpha = .83$ for partner-used psychological aggression; Physical Assault (12 items): $\alpha = .90$ for self-used, $\alpha = .93$ for partner-used physical assault. Several questions regarding the length of the violent relationship and perceived current threat were added.

Child maltreatment. Child maltreatment was assessed with the Dutch translation (Lamers-Winkelman, Slot, Bijl, & Vijlbrief, 2007) of the Parent-Child Conflict Tactics Scales (CTSPC; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). Test–retest reliability and construct and discriminant validity for the CTSPC have been demonstrated (Straus et al., 1998). Maltreatment was clustered into five scales, of which two were used in this study: Psychological Aggression (5 items): $\alpha = .63$ for self-used, $\alpha = .71$ for partner-used psychological aggression; Physical Assault (*severe* and *very severe*, 8 items): $\alpha = .08$ for self-used, $\alpha = .79$ for partner-used physical aggression. For each item the parent was asked to rate how often the child was treated in this way in the past year, ranging from 1 (*never happened*) to 8 (*more than 20 times in the last year*). Each rating was recoded into a frequency score (range: 0–25).

Treatment differentiation and adherence. To be able to attribute changes in children's adjustment to the program, hypothesized effective specific factors of the specific factors program should not be used in the control program, and the manual for both programs should be adhered to. Treatment differentiation was coded in 5-min intervals in which raters assessed whether a (non-)specific factor was applied or not. In the children's sessions specific factors coded, were emotion differentiation and regulation, coping skills, and sharing experiences regarding interparental violence. Non-specific factors coded were structure, positive attention and sharing of general experiences. In the parent's sessions specific factors coded were psycho-education, parenting skills, sharing experiences regarding the impact of IPV on the children and themselves, and enhancing the current social network. Nonspecific factors coded were positive attention and sharing of general and parenting experiences. Adherence was assessed on a 5-point scale, consisting of: 1 (*program not given according to manual*), 2 (*large deviations from manual*), 3 (*limited number of deviations from manual*), 4 (*few deviations from manual*) and 5 (*no deviations from manual*). At least two parent- and two child sessions per group were video-taped, and in most cases all sessions. Randomly

Table 2
Mean score, standard deviations and percentages of children in clinical range of internalizing and externalizing problems (CBCL, TRF), depressive symptoms (CDI) and post-traumatic stress symptoms (TSCYC, TSCC), of both conditions, at baseline, posttest and at follow-up.

Outcome	Intervention condition				Control condition			
	M	*SD*	%	*N*	*M*	*SD*	%	*N*
CBCL Internalizing								
Baseline	57.59	10.70	33.3	93	60.14	9.66	42.9	49
Post-test	52.13	10.81	14.4	90	52.40	9.75	14.6	48
Follow-up	51.30	10.52	11.2	89	50.89	11.62	17.4	46
CBCL Externalizing								
Baseline	54.04	10.88	16.1	93	57.16	11.39	26.5	49
Post-test	50.02	11.13	12.2	90	52.21	11.87	18.8	48
Follow-up	50.48	9.81	7.9	89	50.35	12.72	15.2	46
TRF Internalizing								
Baseline	56.86	9.38	28.2	71	58.23	8.08	28.6	35
Post-test	54.60	10.15	22.4	67	56.65	9.10	29.0	31
Follow-up	54.62	9.88	21.2	66	56.18	9.58	39.4	33
TRF Externalizing								
Baseline	56.14	9.82	23.9	71	57.69	11.46	28.6	35
Post-test	55.28	9.47	17.9	67	55.97	8.75	22.6	31
Follow-up	53.85	9.00	15.2	66	57.52	9.92	27.3	33
CDI (child-report)								
Baseline	61.37	26.52	14.5	76	64.23	24.32	10.3	39
Post-test	53.34	31.02	13.5	74	52.90	29.70	10.3	39
Follow-up	50.79	31.03	8.5	71	47.06	29.92	5.7	35
TSCYC (parent-report)								
Baseline	59.87[a]	14.58	16.5	85	66.79	14.15	38.1	42
Post-test	55.36	13.74	13.0	77	57.59	9.72	7.7	39
Follow-up	54.40	12.08	10.0	80	55.22	12.08	10.8	37
TSCC (child-report)								
Baseline	49.46	9.65	10.8	65	50.52	9.42	10.3	29
Post-test	46.39	10.00	6.8	64	44.21	10.26	3.6	29
Follow-up	45.20	9.87	6.7	61	45.00	10.52	7.7	27

[a] Intervention versus Control, $p = .01$.

selected tapes of 1 to 5 sessions ($M = 3.28$) per group (total of 36 groups: 26 specific factors intervention groups, 10 control groups) were coded to assess treatment differentiation and treatment adherence. Five undergraduate students were trained by the first and second author to assess treatment differentiation and adherence; three students were trained in coding the child sessions, and two in coding the parent sessions. Every coder coded 17% of their sessions together with another coder to assess agreement between coders. Coders were blind to the research question of treatment differentiation between conditions. Agreement for treatment differentiation in the child sessions ranged from $r = .45$ to $r = 1.00$ across categories, with a mean of $r = .92$. In the parent sessions agreement ranged from $r = .40$ to $r = .94$ across categories, with a mean of $r = .74$; the factors with low occurrence had the lowest reliability. Agreement for treatment adherence ranged from $r = .69$ to $r = .94$ over couples (Table 3).

Statistical procedure

All continuous outcome measures were checked for outliers ($-3.29 < Z < 3.29$), and outliers were winsorized to the nearest non-outlier (26 values of 13 children; Tabachnick & Fidell, 2007). In order to answer the question whether children exposed to specific and non-specific factors in the specific factors intervention program improved more than children only exposed to non-specific factors in the control program, a multilevel growth model was fitted to account for the change of scores of children over time, using SPSS Mixed Models (IBM SPSS Statistics version 20). Preliminary analyses were used to check whether 'organization' and 'treatment group within condition' should be modeled as a level as well. For every outcome measure the ICC value was calculated to calculate the proportion of variation across organizations/treatment groups, compared to the proportion of variation within organizations/treatment groups. For all outcome measures the design effect was smaller than 2.0, indicating no need to model organization or treatment group as a separate level (Peugh, 2010). The fitted model consisted of two levels: time (level 1) and child (level 2). A random intercept, and a random slope, except for TRF Internalizing and PTSD child self-report, was fitted for each child, allowing for variation between children. Time and Condition were added as predictors, as well as the quadratic trend of time (Time*Time), because it was expected that children would show a steeper decline in problems during participation in the program, than from posttest till follow-up. For parsimony, the initial full model was reduced by dropping non-significant terms for each child outcome ($p > .05$).

Results

Descriptive analyses

Interparental violence and child maltreatment. The frequency of events involving psychological aggression in the last year of the violent relationship by the reporting parent was 27.20 ($SD = 30.41$, range: 0–133), and by their partner 64.00 ($SD = 52.03$, range: 0–200). The frequency of events involving physical aggression by the reporting parent was 7.33 ($SD = 21.48$, range: 0–226), and by their partner 47.38 ($SD = 65.53$, range: 0–275). All included parents reported at least one event for either psychological or physical interparental violence. Eighteen parents reported only incidents of psychological aggression. The frequency of events involving psychological maltreatment of the child in the past year by the reporting parent was 6.19 ($SD = 11.57$, range: 0–70), and by their partner 13.40 ($SD = 21.78$, range: 0–104). The frequency of events involving physical maltreatment of the child in the past year by the reporting parent was 0.45 ($SD = 1.69$, range: 0–15), and by their partner 3.62 ($SD = 13.79$, range: 0–104). There were no differences between conditions in degree and type of interparental violence or child maltreatment.

Outcome variables. Table 2 shows the means and standard deviations for the outcome variables internalizing and externalizing problems reported by parents and teachers, depressive symptoms reported by children, and post-traumatic stress symptoms reported by parents and children. The percentage of children in the clinical range at baseline, posttest and at follow-up is also shown. There were no significant differences between children in the specific factors intervention condition and control condition at baseline in outcome measures, except on the level of parent-reported post-traumatic stress symptoms; at baseline children in the control condition had more post-traumatic stress symptoms than children in the specific factors condition.

Intention-to-treat analyses

The main model was first tested for all 155 parent-child dyads that enrolled in the study and had a valid score at baseline for this outcome measure and a score on at least one other assessment. Missing values in each questionnaire were handled as described in the manual for each specific questionnaire. When participants had more missings than the total number allowed for that questionnaire, their total score for this questionnaire on this assessment was coded as missing.

Parent-report: Internalizing and externalizing problems. Irrespective of condition, parent-reported internalizing problems ($B = -8.56$, $t(1, 158.28) = -6.58$, $p < .001$) and externalizing problems ($B = -5.84$, $t(1, 164.42) = -5.26$, $p < .001$) decreased linearly over time. The quadratic trend was also significant and positive, indicating the rate of decrease diminished over time (internalizing: $B = 2.44$, $t(1, 132.81) = 3.91$, $p < .001$; externalizing: $B = 1.76$, $t(1, 137.43) = 3.33$, $p = .001$).

Teacher-report: Internalizing and externalizing problems. Teachers' reports, similar to parents', showed a decrease in internalizing problems in children from baseline to posttest, which was maintained to follow-up ($B = -0.97$, $t(1, 199.90) = -2.10$,

$p = .037$), irrespective of condition. Contrary to parent-report, teachers' reports showed no significant decrease in externalizing problems over time ($B = -0.63$, $t(1, 104.61) = -1.54$, $p = .126$), neither in the specific factors intervention condition nor in the control condition.

Child self-report: Depressive symptoms. Children's self-reports revealed a decrease in depressive symptoms over time from baseline to posttest, which was maintained to follow-up ($B = -6.72$, $t(1, 111.76) = -5.88$, $p < .001$), irrespective of condition.

Post-traumatic stress symptoms. Parents' reports showed a significant linear ($B = -10.47$, $t(1, 174.05) = -5.83$, $p < .001$) and quadratic ($B = 2.39$, $t(1, 113.05) = 3.02$, $p = .003$) effect of time on the level of post-traumatic stress symptoms in children in both conditions. The mean level of post-traumatic stress symptoms of children in the specific factors intervention condition was significantly lower than the mean level of post-traumatic stress symptoms of children in the control condition ($B = -6.31$, $t(1, 126.35) = -2.42$, $p = .017$). Apart from a main effect of time, an interaction effect between time and condition was found ($B = 2.97$, $t(1, 122.82) = 2.76$, $p = .007$): children in the control condition decreased in symptomatology at a steeper slope than children in the specific factors intervention condition. Children's self-reports revealed a linear ($B = -5.75$, $t(1, 182.00) = -3.55$, $p < .001$) and quadratic ($B = 1.65$, $t(1, 182.38) = 2.11$, $p = .037$) effect of time on their own post-traumatic stress symptoms, irrespective of condition.

Completer analyses

The main model was also tested for parent-child dyads of which the child participated in at least five of the nine sessions ($n = 113$) and again for dyads of which the child participated in at least seven of the nine sessions ($n = 78$). The models predicting parent-reported internalizing and externalizing problems, teacher reported internalizing and externalizing problems, child self-reported depressive symptoms and post-traumatic stress symptoms were similar for parent-child dyads of which the child participated in at least five/seven sessions as for all participating parent-child dyads. Completer analyses for dyads of which the child participated in at least five/seven sessions for parent-reported post-traumatic stress symptoms showed a significant decrease over time (5 sessions: $B = -7.93$, $t(1, 122.01) = -4.67$, $p < .001$; 7 sessions: $B = -7.92$, $t(1, 87.67) = -3.85$, $p < .001$). No differences in scores at baseline between conditions, and no interaction between time and condition were found, suggesting that the initial interaction between time and condition, found in the intention-to-treat analyses, was caused by the difference in scores between conditions at baseline.

Passage of time

To estimate the effect of spontaneous recovery from adjustment problems through passage of time, a model was fitted with 'time since violence stopped until enrollment in the program' as a predictor. Even though one of the inclusion criteria for participation in the program was that the violence had stopped, parents of 71 families (46%) still experienced threat of violence. The average time since the violence stopped was 9.7 months ($SD = 15.8$ months). There were no differences between conditions regarding the time since the violence stopped ($F(1, 151) = 0.013$, $p = .908$). For none of the outcome measures was 'time since the violence stopped' a predictor of the level of problem behavior or a moderator of the slope of the decrease of problems over time.

Treatment differentiation and adherence

Clear treatment differentiation between conditions was found. In particular general specific factors (such as emotion differentiation and coping skills in the children's sessions and psycho-education and parenting skills in the parents' sessions), specific trauma-focused factors (such as emotion regulation and coping skills regarding IPV and psycho-education and parenting skills regarding IPV) and non-specific factors (such as positive attention, sharing general experiences and structure) were more often present in the specific factors intervention condition than in the control condition (Table 3). Adherence was assessed, and for the child sessions of the specific factors intervention there were no or few deviations from the manual in 69% of the cases, in 31% of the cases there was a limited number of deviations ($M = 3.81$, $SD = 0.75$); for the parent sessions no or few deviations from the manual occurred in 72% of the cases, in 28% of the cases a limited number of deviations occurred ($M = 3.76$, $SD = 0.77$). For the control condition, there were no or few deviations from the manual for the child sessions in 78% of the cases, in 22% of the cases there was a limited number of deviations ($M = 3.89$, $SD = 0.65$); no or few deviations from the manual for the parent sessions of the control program occurred in 87.5% of the cases, and in 12.5% a limited number of deviations from the manual occurred ($M = 4.25$, $SD = 0.76$). Deviations from the manual were never large and adherence was neither a significant moderator of the decrease of problems, nor was higher adherence associated with a larger difference in recovery between conditions.

Discussion

The community-based intervention with specific factors for children exposed to IPV did not show benefits over a community-based control intervention based on non-specific factors. Children in both conditions decreased in their symptomatology from baseline to posttest, and their symptoms remained at this decreased level to follow-up six months later. When the outcomes of all children participating in the trial were taken into account (intention-to-treat analyses), children

Table 3
Treatment differentiation of specific factors intervention and control condition.

Hypothesized effective components	Intervention	Control	*p*	*r*
Child				
Emotion differentiation & regulation	47.4	7.8	<.001	.87–.96
Emotion differentiation & regulation: IPV	10.7	0	<.001	.96–.99
Teaching general coping skills	17.3	0.9	<.001	.95–.99
Coping skills regarding IPV	6.7	0	<.001	1.00
Sharing of experiences regarding IPV	9.1	0	<.001	1.00
Structure	36.4	35.1	.879	.45–.82
Positive attention	69.5	58.2	.039	.73–.99
Parent				
Psycho-education in general	30.9	7.0	<.001	.85
Psycho-education: impact of IPV on child	11.4	1.7	<.001	.48
Parenting skills in general	33.6	4.8	<.001	.90
Parenting skills: take child's perspective regarding IPV	8.2	0.4	<.001	.40
Sharing experiences impact IPV on child	11.8	2.0	<.001	.80
Sharing of general experiences	63.6	55.7	.391	.94
Positive attention	69.7	51.4	.011	.83

Note. Reported numbers are averages of percentages of time intervals in which factor occurred.

participating in the control condition decreased at an even steeper slope in their level of parent-reported post-traumatic stress symptoms than children in the specific factors intervention condition, although this might be due to the fact that, despite randomization, children in the control condition had higher mean levels of post-traumatic stress symptoms than children in the specific factors condition.

Passage of time and self-adaptation may be one explanation for the recovery in both conditions. In adult psychotherapy, extra therapeutic factors, such as spontaneous recovery, have been shown to explain a large part of recovery (Cuijpers et al., 2012), and children have been found to be resilient in the face of IPV (Graham-Bermann, Gruber, Howell, & Girz, 2009). However, in this study, time since exposure was neither associated with mean symptom level, nor with decrease of problems over time. Also, Graham-Bermann and her colleagues (2007) found in their efficacy trial no improvement over time from baseline to posttest in their waiting list control condition, suggesting that passage of time by itself is not sufficient in explaining recovery. This leaves open the possibility that participation in either of the two interventions supported recovery after witnessing IPV.

The lack of superiority in effectiveness of the specific factors intervention program over the control program was unlikely the result of common methodological limitations, such as low statistical power, unfocused measurement, treatment diffusion or too short follow-up. The number of participants in each condition provided sufficient statistical power for finding the medium effect size expected on the basis of previous studies. Questionnaires were sensitive enough to measure a change in the behavior of children over time, so these should also be sensitive enough to measure a difference between conditions if it existed. Measurement covered both broad band behavioral functioning as well as trauma symptoms. Treatment differentiation was assessed and the percentages of applied effective elements in the specific factors intervention condition and the lack of application of these elements in the control condition make it unlikely that diffusion of treatment components between interventions has taken place. Treatment adherence was also monitored and tested as a moderator. Contrary to our hypothesis, higher treatment adherence of both programs was not associated with a larger difference in recovery between conditions. Perhaps, this was because in both programs there were usually few deviations from the manual. Follow-up is not always used in intervention studies for children exposed to IPV (Cohen et al., 2011; Lamers-Winkelman, 2003). Establishing a satisfying time frame for follow-up is difficult in intervention studies, because longer timeframes increase the proportion of families that receive other treatment. Six month follow-up was 2.5 times as long as the time between pretest and posttest and appeared an adequate time frame to assess the stability of change in behavior, while still ethically acceptable, and short enough to realistically attribute changes to participation in the program. However, it may be that the differential change in behavior of the children participating in the specific factors intervention condition and children participating in the control condition requires a longer time to emerge.

The format of both programs was in some respects different from other intervention programs for children exposed to IPV. Sessions of the studied program were 90 min instead of 1 h or less (e.g. Cohen et al., 2011; Graham-Bermann et al., 2007). This longer session duration could have influenced the findings; however 15 min of the 90 min sessions were used as a break in which the children could participate in fun, unrelated activities (e.g. play outside in the playground), and a variety of different methods were used, to not tax the attention span of the children too much. Since these alternative explanations in the design of the study are not very likely to explain the lack of found difference between both conditions, it seems more likely that this is caused by a genuine lack of difference.

While contrary to our initial hypothesis, our results are in line with other studies that fail to find evidence for specific factors in psychotherapeutic interventions for adults. In a meta-analysis, Baskin and his colleagues studied the efficacy of placebo treatments in adult psychotherapy (Baskin, Tierney, Minami, & Wampold, 2003). They compared active treatments with placebos similar in number and duration of sessions, training of therapist, format of therapy and restriction of topics, and with structurally unequal placebos. They found differences in efficacy between treatments and unequal placebos, but

negligible differences between efficacy of active treatments and structurally equivalent placebos. More specifically, a specific trauma focus may not be a precondition for effectiveness in intervention. Wampold et al. (2010) tested in a meta-analysis the relative efficacy of bona fide psychotherapies for adults with post-traumatic stress disorder. They found no outcome differences between trauma focused and not-trauma focused therapies for either post-traumatic stress symptoms or other outcome measures. In Wampold et al.'s meta-analysis only bona fide therapies were included, and no no-treatment controls or control treatments not intended to be therapeutic. A specific trauma focus may also have less added value for interventions with children growing up in violent homes, because many of these children have been exposed to a variety of stressors in their lives (Cummings & Davies, 2010). A program with specific intervention factors aimed at one type of stressor (IPV) may not be more effective than a program with only non-specific factors. It should be noted, however, that in the current study, effectiveness of a community-based implementation of specific factors was tested. Under optimal conditions, which can be created in efficacy trials, specific factors may be of added value.

Graham-Bermann and her colleagues also found in their study (Graham-Bermann et al., 2007) an improvement over time in parent-reported emotional and behavioral problems of children participating in a community-based intervention program. Children in the condition with parallel parent sessions improved the most, compared to children participating in a program with only child sessions or a waiting-list condition. Because of the design of the study of Graham-Bermann and her colleagues, in which two intervention programs with similar content were compared with a waiting-list condition, no conclusions could be drawn from these results about the relative effectiveness of non-specific factors in intervention. Our results complement this study by differing the content instead of the format of both programs and concentrating on added effectiveness of specific factors in community-based interventions.

In addition to the beneficial effect of involvement of parents and non-specific factors in interventions, it is also possible that disclosure of the violence during intake may be helpful and can result in positive outcomes for children. All parents and children have had an intake before participation in the program, and during this intake therapists discussed the occurrence of IPV. In a randomized controlled study regarding the behaviors of children whose abused mothers attended a treatment program, McFarlane and her colleagues found no differences in level of behavioral problems of children whose mothers received abuse assessment and only an information card, and children whose mothers participated in a nurse case management (individual) intervention (McFarlane et al., 2005). All mothers had an interview in which the abuse was discussed, leading the authors to suggest that perhaps solely the disclosing of the abuse may be helpful in itself.

Parents' reports and children's self-reports showed more improvement in mean scores of behavioral problems than teachers' reports. Mean scores of teacher-reported internalizing and externalizing problem behavior over all three assessments ranged from 54 to 58 on a scale ranging from 37 to 100, so changes were small, and in half of the cases children changed grades and a different teacher reported at follow-up than at posttest. The discrepancy between mean scores of parent and child self-reported behavior compared with mean scores of teacher reported behavior could be caused by the fact that (a) children did not change, but participation in an intervention caused expectations regarding behavioral change, and teachers were blind for these expectations; (b) children did change in their behavior and parent report and child self-report reflect these changes, but teachers still have fixed ideas about the children in their class and keep seeing them as they were, instead of how they are; or (c) children mainly changed in the family context, and these changes did not (yet) extend to the school setting. Further research is needed to assess which of these three explanations is the most suitable.

Limitations

The study design did not include a no-intervention control condition, due to ethical objections by the community organizations implementing the program. However, when the passage of time was included as a predictor in the analyses, passage of time did not predict the level of problem behavior or moderate the slope of the decrease of problems over time. These results suggest that the passage of time alone did little to nothing in reducing problems of children exposed to IPV. In retrospect, this finding also justified the clinical concerns that led to the omission of a no treatment waiting list condition.

Although the Revised Conflict Tactics Scales is a reliable measure to determine the tactics used in conflicts, it is limited as an instrument to assess children's exposure to these conflicts. During the same incident several tactics may be used, resulting in a relatively high estimate of children's exposure to conflicts and violence. Children's own report may be more accurate.

Future directions

We assessed outcome measures with questionnaires for parents, teachers and children. The answers to these questionnaires may be partly based on perceptions and expectations, instead of actual behavior. Parents' self-reported outcomes have been found to be unrelated to observed behavior (Bailey, DeOliveira, Wolfe, Evans, & Hartwick, 2012). Different results regarding intervention-effects may be obtained with observation measures as outcomes.

The children in our sample were from a diverse cultural background, on average of a low social economic status, and often exposed to several risk factors besides IPV (parental mental health problems, alcohol/substance abuse, child abuse).

The more adverse experiences children have to endure, the more likely they are to develop problems (Fergusson & Horwood, 1998). With this diversity, the question arises whether interventions should be more tailored.

Our study focused on the effectiveness of specific factors used in a community-based intervention program for children exposed to IPV with varying degrees of problems. How these results would apply to therapy programs, such as TF-CBT, for children with clinical levels of problems remains to be seen.

Clinical implications

The focus in previous studies has been on studying efficacy of interventions for children exposed to IPV under ideal circumstances. The results of this study show that potentially effective components tested in efficacy trials (trauma-focus, parenting skills) may not stand the translation to the real world, with heterogeneous samples with comorbid problems, as well as with peer supervision. The study of factors maximizing the effectiveness of interventions for children exposed to IPV should continue, taking into account the resources that may be available in community settings to carry out these interventions. The current findings also underline the importance of nonspecific intervention factors such as positive attention, play activities for children and social contact for parents. These non-specific factors may be of benefit when offered in community settings as a step towards universal accessibility of interventions for children exposed to interparental violence.

References

Achenbach, T. M., & Edelbrock, C. (2001). *Manual for the child behavior checklist and revised child behavior profile*. Burlington: University of Vermont, Department of Psychiatry.

Alink, L., van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., Pannebakker, F., Vogels, T., & Euser, S. (2011). *Kindermishandeling in Nederland anno 2010; De tweede nationale prevalentie studie mishandeling van kinderen en jeugdigen (NPM-2010) [Child abuse in the Netherlands in 2010; The second national prevalence study of abuse of children and adolescents]*. Leiden, The Netherlands: Casimir Publishers.

American Academy of Child and Adolescent Psychiatry. (2010). Practice parameter for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, *49*, 414–430.

Bailey, H. N., DeOliveira, C. A., Wolfe, V. V., Evans, E. M., & Hartwick, C. (2012). The impact of childhood maltreatment history on parenting: A comparison of maltreatment types and assessment methods. *Child Abuse & Neglect*, *36*, 236–246.

Baskin, T. W., Tierney, S. C., Minami, T., & Wampold, B. E. (2003). Establishing specificity in psychotherapy: A meta-analysis of structural equivalence of placebo controls. *Journal of Consulting and Clinical Psychology*, *71*, 973–979.

Blijfgroep. (2009). *Handleiding 'En nu ik..!' [Manual 'It's my turn now!']*. Amsterdam, The Netherlands: Blijfgroep.

Bowlby, J. (1973). *Attachment and loss. Separation, anxiety and danger*. New York, NY: Basic Books.

Briere, J. (1995). *Trauma symptom checklist for children*. Lutz, FL: PAR.

Briere, J. (1997). *Trauma symptom checklist for young children*. Lutz, FL: PAR.

Briere, J., Johnson, K., Bissada, A., Damon, L., Crouch, J., Gil, E., Hanson, R., & Ernst, V. (2001). The Trauma Symptom Checklist for Young Children (TSCYC): Reliability and association with abuse exposure in a multi-site study. *Child Abuse & Neglect*, *25*, 1001–1014.

Campbell, M. K., Elbourne, D. R., & Altman, D. G. (2004). CONSORT statement: Extension to cluster randomised trials. *British Medical Journal*, *328*, 702–708.

Cohen, J. A., Mannarino, A. P., & Iyengar, S. (2011). Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: A randomized controlled trial. *Archives of Pediatrics & Adolescent Medicine*, *165*, 16–21.

Cuijpers, P., Driessen, E., Hollon, S. D., van Oppen, P., Barth, J., & Andersson, G. (2012). The efficacy of non-directive supportive therapy for adult depression: A meta-analysis. *Clinical Psychology Review*, *32*, 280–291.

Cummings, E. M., & Davies, P. T. (2010). *Marital conflict and children: An emotional security perspective*. New York, NY: Guilford Press.

Curiel, E. C. T. (2005). *Mishandeling onder Nederlandse kinderen: Validering van de Trauma Symptom Checklist for Children (TSCC) [Maltreatment among Dutch children: Validation of the TSCC]*. Leiden, The Netherlands: CURIUM (Unpublished master's thesis).

Davies, P. T., Sturge-Apple, M. L., & Cummings, E. M. (2004). Interdependencies among interparental discord and parenting practices: The role of adult vulnerability and relationship perturbations. *Development and Psychopathology*, *16*, 773–797.

De Ruijter, D. A. (1999). *Handleiding 'Let op de Kleintjes' [Manual 'Watch the Kids']*. Utrecht, Netherlands: Transact.

El-Sheikh, M. (2005). The role of emotional responses and physiological reactivity in the marital conflict-child functioning link. *Journal of Child Psychology and Psychiatry*, *46*, 1191–1199.

Evans, S. E., Davies, C., & DiLillo, D. (2008). Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. *Aggression and Violent Behavior*, *13*, 131–140.

Fergusson, D. M., & Horwood, L. J. (1998). Exposure to interparental violence in childhood and psychosocial adjustment in young adulthood. *Child Abuse & Neglect*, *22*, 339–357.

Graham-Bermann, S. A. (1992). *The Kids' Club: A preventive intervention program for children of battered women*. Ann Arbor: University of Michigan, Department of Psychology.

Graham-Bermann, S. A., Gruber, G., Howell, K. H., & Girz, L. (2009). Factors discriminating among profiles of resilience and psychopathology in children exposed to intimate partner violence (IPV). *Child Abuse & Neglect*, *33*, 648–660.

Graham-Bermann, S. A., Lynch, S., Banyard, V., Devoe, E. R., & Halabu, H. (2007). Community-based intervention for children exposed to intimate partner violence: An efficacy trial. *Journal of Consulting and Clinical Psychology*, *75*, 199–209.

Grencavage, L. M., & Norcross, J. C. (1990). Where are the commonalities among the therapeutic common factors. *Professional Psychology-Research and Practice*, *21*(5), 372–378.

Grych, J. H. (2002). Martial relationships and parenting. In M. H. Bornstein (Ed.), *Handbook of parenting, Vol. 4. Social conditions and applied parenting* (2nd ed., pp. 203–226). Mahwah, NJ: Lawrence Erlbaum.

Hamby, S. L., Finkelhor, D., Turner, H., & Ormrod, R. (2011). *Children's exposure to intimate partner violence and other family violence (NCJ 232272)*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Jouriles, E. N., McDonald, R., Rosenfield, D., Stephens, N., Corbitt-Shindler, D., & Miller, P. C. (2009). Reducing conduct problems among children exposed to intimate partner violence: A randomized clinical trial examining effects of Project Support. *Journal of Consulting and Clinical Psychology*, *77*, 705–717.

Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *71*, 339–352.

Kovacs, M. (1982). *Children's Depression Inventory manual*. North Tonawanda, NY: Multi-Health Systems.

Lamers-Winkelman, F. (2003). *Een huilend huis: Effectmetingen 'Let op de Kleintjes' [A crying house: Effectiveness of the Dutch intervention program 'Watch the Kids']*. Middelburg/Amsterdam, The Netherlands: Scoop/VU University, FPP.

Lamers-Winkelman, F., Slot, N. W., Bijl, B., & Vijlbrief, A. C. (2007). *Scholieren over mishandeling: Resultaten van een landelijk onderzoek naar de omvang van kindermishandeling onder leerlingen van het voortgezet onderwijs [Students about abuse: Results of a national survey on the extent of child abuse among secondary school students]*. Amsterdam, The Netherlands: Ministry of Justice.

Lanktree, C. B., Gilbert, A. M., Briere, J., Taylor, N., Chen, K., Maida, C. A., & Saltzman, W. R. (2008). Multi-informant assessment of maltreated children: Convergent and discriminant validity of the TSCC and TSCYC. *Child Abuse & Neglect*, *32*, 621–625.

Lieberman, A. F., Van Horn, P., & Ippen, C. G. (2005). Toward evidence-based treatment: Child-parent psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child and Adolescent Psychiatry*, *44*, 1241–1248.

Litrownik, A. J., Newton, R., Hunter, W. M., English, D., & Everson, M. D. (2003). Exposure to family violence in young at-risk children: A longitudinal look at the effects of victimization and witnessed physical and psychological aggression. *Journal of Family Violence*, *18*, 59–73.

Marchand, E., Stice, E., Rohde, P., & Becker, C. B. (2011). Moving from efficacy to effectiveness trials in prevention research. *Behaviour Research and Therapy*, *49*, 32–41.

McFarlane, J. M., Groff, J. Y., O'Brien, J. A., & Watson, K. (2005). Behaviors of children following a randomized controlled treatment program for their abused mothers. *Issues in Comprehensive Pediatric Nursing*, *28*, 195–211.

McWhirter, P. T. (2011). Differential therapeutic outcomes of community-based group interventions for women and children exposed to intimate partner violence. *Journal of Interpersonal Violence*, *26*, 2457–2482.

Mohr, D. C., Spring, B., Freedland, K. E., Beckner, V., Arean, P., Hollon, S. D., Ockene, J., & Kaplan, R. (2009). The selection and design of control conditions for randomized controlled trials of psychological interventions. *Psychotherapy and Psychosomatics*, *78*, 275–284.

Nan, M., & Koopman, M. (2009). *Psychometrische karakteristieken van de Nederlandse vertaling van de Trauma Symptom Checklist for Young Children (TSCYC) [Psychometric characteristics of the Dutch translation of the TSCYC]*. Amsterdam, The Netherlands: VU University (Unpublished master's thesis).

Overbeek, M. M., De Schipper, J. C., Lamers-Winkelman, F., & Schuengel, C. (2012). The effectiveness of a trauma-focused psycho-educational secondary prevention program for children exposed to interparental violence: Study protocol for a randomized controlled trial. *Trials*, *13*(12).

Perry, D. B. (1993). Neurodevelopment and the neurophysiology of trauma II: Clinical work along the alarm-fear-terror continuum. *The APSAC Advisor*, *6*, 14–20.

Peugh, J. L. (2010). A practical guide to multilevel modeling. *Journal of School Psychology*, *48*, 85–112.

Rizo, C. F., Macy, R. J., Ermentrout, D. M., & Johns, N. B. (2011). A review of family interventions for intimate partner violence with a child focus or child component. *Aggression and Violent Behavior*, *16*, 144–166.

Sternberg, K. J., Baradaran, L. P., Abbott, C. B., Lamb, M. E., & Guterman, E. (2006). Type of violence, age, and gender differences in the effects of family violence on children's behavior problems: A mega-analysis. *Developmental Review*, *26*, 89–112.

Straus, M. A., Hamby, S. L., BoneyMcCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, *17*, 283–316.

Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child Abuse & Neglect*, *22*, 249–270.

Sullivan, C. M., Bybee, D. I., & Allen, N. E. (2002). Findings from a community-based program for battered women and their children. *Journal of Interpersonal Violence*, *17*, 915–936.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Cranbury, NJ: Pearson Education.

Timbremont, B., & Braet, C. (2009). *Handleiding CDI: Children's Depression Inventory [Manual CDI: Children's Depression Inventory]*. Amsterdam, The Netherlands: Pearson.

Verhulst, F. C., Ende, v. d. J., & Koot, H. M. (1996). *Handleiding voor de CBCL/4-18 [Manual for the CBCL/4-18]*. Rotterdam, The Netherlands: Sophia Kinderziekenhuis/Academisch Ziekenhuis Rotterdam/Erasmus Universiteit Rotterdam.

Verhulst, F. C., Ende, v. d. J., & Koot, H. M. (1997). *Handleiding voor de Teacher's Report Form/4-18 [Manual for the TRF/4-18]*. Rotterdam, The Netherlands: Sophia Kinderziekenhuis/Academisch Ziekenhuis Rotterdam/Erasmus Universiteit Rotterdam.

Wagar, J. M., & Rodway, M. R. (1995). An evaluation of a group treatment approach for children who have witnessed wife abuse. *Journal of Family Violence*, *10*, 295–306.

Wampold, B. E., Imel, Z. E., Laska, K. M., Benish, S., Miller, S. D., Flückiger, C., Del Re, A. C., Baardseth, T. P., & Budge, S. (2010). Determining what works in the treatment of PTSD. *Clinical Psychology Review*, *30*, 923–933.

Weisz, J. R., Sandler, I. N., Durlak, J. A., & Anton, B. S. (2005). Promoting and protecting youth mental health through evidence-based prevention and treatment. *American Psychologist*, *60*, 628–648.